NTSB ID: DEN02GA039

Aircraft Registration Number: N990CC

Occurrence Date: 04/26/2002

Most Critical Injury: Fatal

Occurrence Type: Accident

Investigated By: NTSB

Location/Time

Nearest City/Place	State	Zip Code	Local Time	Time Zone	
USAF Academy	СО	80840	1208	MDT	
Airport Proximity: Off Airport/Airstrip	Distance Fror	m Landing Facility:	2	Direction Fro	m Airport: 280

Aircraft Information Summary

Aircraft Manufacturer	Model/Series	Type of Aircraft
Piper/Cub Crafters	PA-18-150	Airplane

Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

 $Brief\ narrative\ statement\ of\ facts,\ conditions\ and\ circumstances\ pertinent\ to\ the\ accident/incident:$

HISTORY OF FLIGHT

On April 26, 2002, at 1208 mountain daylight time, a Piper/Cub Crafters PA-18-150, N990CC, registered to Doss Aviation of Colorado Springs, Colorado, and operated by the United States Air Force Academy, was destroyed when it struck trees and terrain following an uncontrolled descent while towing a Schwiezer T6-4A glider, N7538, at the United States Air Force Academy, Colorado. The commercial pilot, the sole occupant aboard, was fatally injured. Day visual meteorological conditions prevailed, and no flight plan had been filed for the public use flight being operated under Title 14 CFR Part 91. The local flight originated at 1204.

The following is based on personal interviews with, and a written statement from, the cadet glider instructor. The instructor allowed the cadet student pilot to attempt the takeoff to the south, but "he got us off center and I was forced to take the plane from him." When the tow plane and glider turned onto the crosswind leg, the glider instructor "noticed something strange. The tow pilot flew directly west for a much longer period of time than usual." Once they had turned onto the downwind leg, however, the instructor allowed the student to take control of the glider. "Almost immediately, [he] got out of position, namely, a little high and right [of] the tow plane." The instructor took over and pointed out the student's mistake. When he was given control again, "the same thing happened and he proceeded to get high and right once again." The instructor took control again "only this time when I tried to recover I noticed the tow plane was directly below me and our tow rope was almost completely taught (sic)." She decided to hold their position and raised the nose about 1-3 degrees to reduce airspeed and make it easier for the tow plane to get back in position. At an altitude approximately 7,600 feet, "[the tow plane suddenly] pulled sharply to the left in what I thought was a turn. I held on until [my student] pointed out he was in a spiral ' The glider was "pulled to a straight down position." As the instructor was attempting to pull the release, she heard a loud "snap" and the glider broke free of the tow approximately 7,100 feet, but not before it "had followed the turn for about 270 degrees." They saw the tow plane strike the ground, explode and burn. They returned to the airfield and landed at 1212.

The following is based on personal interviews with, and a written statement from, the student pilot aboard the glider. This was his second flight and he corroborated the account given by the cadet instructor pilot. He said he allowed the glider to get too high and to the right of the tow plane. A "slack line" developed because he failed to "apply enough forward pressure on the stick [and] the tow plane did not pull up to correct the slack line." The cadet student pilot said he saw that the glider was "really high" above the tow plane, "approximately 100 to 150 feet above," the tow plane was at their 11 o'clock position, and it appeared they were overtaking it. Twice, he asked the instructor if they should release the tow because the tow line appeared to be taut. "About this time the towline went taught (sic) which caused the tail of the tow plane to be lifted up and to the left, and our aircraft's nose to be pulled down and to the right." The tow line broke when the glider was pulled into a near-vertical attitude. The student watched as the tow plane continued

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Narrative (Continued)

"the induced turn and fly into the ground." The instructor was able to recover from the dive and land.

Ten witnesses submitted written statements. Several of those witnesses were interviewed. The following is based on those witness' interviews and statements. Witness #1, a student pilot in a glider behind the mishap tow plane, noticed it was "extremely low...it did not appear to be at a dramatic down angle. The it was into the trees and I saw an explosion. The plane was not spinning and did not appear to be out of control. It just flew straight into the ridge." Witness #2, another cadet student pilot preparing to enter the traffic pattern, saw the tow plane "just nose straight down in a dive and impact."

Witness #3, a control tower spotter who had just come on duty, saw the tow plane "flying straight at the ground [and] disappear behind the ridge." Witness #4, and observer in the tower, saw and aircraft "flying directly towards the ground" and disappear behind the tree line. Witness #5 corroborated these statements, saying he "saw the tow plane in a nosedive" before it disappeared behind a ridge.

Witness #6 saw "a tow plane dive away from a sail plane" at pattern altitude, then he saw "the tow plane continue to bank and spiral into the ground," making no apparent attempt to recover. The duty SOF (witness #7) agreed, saying "it looked like a left hand spin" from base to final.

Witness #8 was stopped at the intersection of the football stadium access road and Douglass Drive when he saw the tow plane in "an unusual attitude" that reminded him of a "wing over." The airplane was about 800 to 900 feet above the ground, and in a 40-45 degree nose high/75-85 degree left wing low attitude. The nose fell through the horizon past vertical, then straight down before making a "steady and positive" recovery. "It entered the trees at about 40-45 degrees nose low, heading in an easterly direction." Witness #9, a retired Air Force fighter pilot, was driving west on Community Center Drive when he saw the tow plane about 300 feet above the ground and in a 45-60 degree nose-low dive. Witness #10, a commercial pilot, was southbound on Interstate Highway 25 and north of the Academy airfield when he saw the tow plane make "a descending spiral" from about 300-500 feet. It was "nearly vertical" when it disappeared in the trees.

The accident occurred during daylight hours at a location of 38 degrees, 59.072' north latitude, and 104 degrees, 50.407' west longitude.

PERSONNEL INFORMATION

Doss Aviation, Inc., employed the 72-year-old tow plane pilot, a retired USAF fighter pilot, in February 1992. He held a commercial pilot certificate with airplane single-engine land, multiengine land, and instrument ratings. He was also type rated in the Cessna 500. The pilot was issued a second-class airman medical certificate, dated August 30, 2001, that contained the restriction, "Holder shall wear lenses that correct for distant vision, and possess glasses that correct for near vision. Medical certificate not valid for any class after August 31, 2002." The special issuance certificate under Title 14 CFR Part 67.19 was granted after the pilot underwent bypass surgery in 2000. The pilot's logbook was not located, but information provided by Doss Aviation indicated he had logged 15,479 total flight hours as of January 2002, of which approximately 8,000 hours were in the PA-18. In the previous 90 days, he had logged 150 hours. His last biennial flight review was accomplished on March 24, 2002; his last company check, consisting of 3 glider aero tows as required by Title 14 CFR Part 61.69, was accomplished on August 29, 2001, and his last recorded instrument proficiency check was on December 10, 1999.

The instructor aboard N7538, a cadet third class, said she had made about 100 glider flights, each flight averaging about 15 minutes. The student pilot aboard N7538 said that this was his second glider flight.

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Narrative (Continued)

AIRCRAFT INFORMATION

Cub Crafters of Yakima, Washington, manufactured N990CC, a Piper/Cub Crafters PA-18-150 (s/n 9917CC), commonly known as the "Super Cub," in November 2000. It was equipped with a Lycoming O-360-ClG engine (s/n L-37720-36A), rated at 180 horsepower, and a McCauley two-blade, all-metal, fixed-pitch propeller (m/n 1A200/FA8242, s/n YF020), manufactured on October 19, 2000. On November 7, 2000, the propeller was repitched to 42-40 inches, and reinstalled on the airplane on November 10, 2000. At the time of the accident, the airframe had accrued 1,215 total hours. The tail hook installed on N990CC was a Schweitzer model 3415D.

According to the airframe maintenance logbook, the following 100-hour inspections were performed:

DATE	TOTAL TIME
April 17, 2002 February 19, 2002	1,200
December 21, 2001	1,000
November 1, 2001	900 (annual inspection)
September 28, 2001	800
August 21, 2001	700
July 25, 2001	600
July 5, 2001	500
June 14, 2001	400
April 26, 2001	300
March 15, 2001	200
February 2, 2001	100
November 10, 2000	Certification date

N7538, a Schweizer TG-4A (USAF s/n 70-0168, civilian s/n 168), was the Air Force version of the Schweizer SGS 2-33A. According to its maintenance records, the airframe was completely overhauled, X-rayed, and rebuilt on June 8, 2000. The work, part of an annual inspection, included the installation of a new tow hook that was accomplished at 14,794.8 hours total time. The most recent annual/100-hour inspection was accomplished on February 1, 2002, when the airframe had accrued an additional 92.2 hours, for a total time of 15,669.1 hours.

METEOROLOGICAL INFORMATION

Weather at the time of the accident, as reported at the Air Force Academy Airfield, was: wind, 210 degrees at 14 knots, variable from 160 to 220 degrees; visibility, 15 statute miles; ceiling, 6,500 feet broken, 10,000 feet broken, 20,000 feet broken; temperature, 61 degrees F.; dew point, 30 degrees F.; altimeter, 29.82 inches; remarks: wind data estimated.

WRECKAGE AND IMPACT INFORMATION

The airplane struck trees and the ground on a magnetic heading of 128 degrees in hilly, forested terrain, and came to rest on a magnetic heading of 204 degrees at an elevation of 6,653 feet msl (mean sea level). A post-impact fire destroyed most of the airplane and the surrounding vegetation. The fuselage, left wing, a portion of the right wing, and both horizontal and the vertical stabilizers were intact, but the fabric had been burned away, exposing the airframe tubing. The right wing tip was located in a nearby tree, and approximately 3 feet of the right wing was located in an adjacent tree. The remaining portion of the right wing was attached to the fuselage. The flap handle and pushrod were in the retracted position.

Examination of the elevator trim gear revealed 13 threads. A Cub Crafters spokesman said this equated to "two-thirds nose down trim." After examining a similar Cub's trim gear, the chief

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Narrative (Continued)

inspector for Doss' Aviation repair station (and a Cub owner, pilot, and mechanic) questioned this value. He calculated the setting was "slightly nose up." An investigator for the New Piper Aircraft Corporation, who had investigated numerous PA-18 accidents, was consulted. He wrote: "The measurement is normally taken from the leading edge stabilizer tube to the fuselage tube just below the jackscrew attach point. The jackscrew has a total of 17 threads if it is extended to the full nose down (4 degrees) position. Conversely, it also has 17 threads from the top if in the full nose up position (2.5 degrees). If the stabilizer is in the neutral position, there should be 6 threads on the bottom and 11 threads on the top (hence a total of 17 threads). The accident picture shows about 13 threads extending from the top of the jackscrew, leaving about 4 threads below the fitting. If there are 2.5 total degrees of travel between neutral and full nose up, each thread should equal about 0.4166 degrees. Since your setting is about 2 threads below the neutral position (nose up), it should equate to 2 x 0.4166 = 0.83 degrees nose up trim."

The instrument panel was destroyed by post-impact fire. The altimeter was also destroyed, but the setting in the Kollsman window was 29.98. The propeller was separated from the airplane. One and of the propeller blade had faint longitudinal striations and chordwise scratches, and was bent aft approximately 45 degrees about 6 inches from the tip. The other end was twisted in the direction of low pitch, and was bent forward approximately 5 degrees about midspan. The spinner was crushed with no discernible spiraling scratches. The tow hook was found unlatched. Approximately 150 feet of tow line was separated from the airplane's tow hook and was draped over trees. Approximately 20 feet of the tow rope was entangled in the branches of a tree adjacent to the wreckage. On one end of this portion of the tow rope was the eyelet that attached to the tow hook on the tow plane. The other end had failed, and the rope braids were "feathered." The remaining portion of the rope and hook that attached to the glider were not recovered. According to USAF Academy officials, the point of failure was in the approximate location of the "weak link," a knot tied in the rope, designed to fail under unusual force. Examination of the glider disclosed no anomalies with its latching mechanism.

MEDICAL AND PATHOLOGICAL INFORMATION

A clinical/anatomical/forensic pathologist with the El Paso County Coroner's Office conducted an autopsy on the pilot. According to her report, the coronary arteries showed "significant atherosclerotic plaque deposition." There was also "evidence of a prior triple bypass grafting procedure." The report stated, "The native left anterior descending artery shows approximately 60% stenosis, while the left circumflex appears completely occluded. The right coronary artery is small and extremely calcified completely," and its "graft is totally occluded by atheroma...No thrombus is identified." Although there was "no evidence of an old myocardial infarct," the aorta and its major branches had "severe calcific atherosclerosis in the infrarenal portion and extending into the iliac arteries." It was the pathologist's opinion that death was due to "blunt force trauma of the head." The pilot "was unequivocally still alive at the time of impact...but dead before the fire broke out." The report concluded, "Examination of the heart found that one of the bypass grafts was completely occluded by a buildup of atherosclerotic plaque. While no thrombus or organized blood clot was found in any of the coronary arteries or bypass grafts that would prove he had an acute myocardial infarction or 'heart attack,' (and such proof is often missing at autopsy even when the clinical evidence is incontrovertible that a blockage did occur in life) the likelihood is high that he did suffer some sort of cardiac event which, while not immediately fatal, did so incapacitate him that he was unable to control the plane or to even use his radio to alert anyone."

Toxicological screens conducted by the El Paso County Coroner's Office and FAA's Civil Aeromedical Institute (CAMI) detected caffeine, ephedrine, and pseudoephedrine in the blood and urine. According to CAMI's toxicologist, caffeine, a common stimulant, is found in coffee, tea, and most soft drinks. Ephedrine, a common cold remedy, is found in such over-the-counter medications as Sudafed.

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Narrative (Continued)

Toxicological screens on the instructor pilot and student pilot, conducted by the Armed Forces Institute of Pathology, detected no ethanol or drugs.

TESTS AND RESEARCH

On May 7, 2002, the engine and accessories installed on N990CC were disassembled and examined at the facilities of Beegles Aircraft Services, Inc., in Greeley, Colorado. The engine was not equipped with a vacuum system or an auxiliary fuel pump; it had only an engine-driven fuel pump. The carburetor composite float was destroyed by fire, and there was no fuel in the bowl or lines. Some small contaminants were noted in the fuel inlet screen. The oil system lines were destroyed by impact and fire, and there was no oil in the reservoir. The ignition harness and both magnetos were fire damaged and could not be tested. The engine crankshaft was rotated by hand, and power train continuity was established. All spark plugs displayed a color consistent with a low service life and normal combustion. Thumb suction and compression were obtained on cylinders #1 and #2, but not on cylinders #3 and #4. All cylinders were borescoped and no defects were noted. Cylinders #3 and #4 were removed. The #3 piston oil control ring was seized in the ring groove. No defects were noted with #4 cylinder.

ADDITIONAL INFORMATION

In a 1986 article entitled, "Tug Aspects --- A Way Forward," published by the British Gliding Association (attached), the author discussed the work that was conducted in the United Kingdom to solve the problem of "kiting" --- tow plane (tug) upsets due to a glider climbing above the tug and "pulling up the tug's tail and forcing the tug into a dive." One tow pilot who survived such an upset reported he lost between 700 and 800 feet before recovering from the induced dive. One remedy to the problem would be to request the glider pilot to release from the tow. Another remedy would be for the tow pilot to release the glider. The majority of the article dealt with various tow hooks and releases that have been tested in glider towing operations.

The 34 Operations Group Manual AM-251, dated 23 February 2001, provides "basic principles and knowledge to enable Airmanship 251 students to learn basic glider skills in a TG-4A." Chapter 6, section 4 of the manual outlines the procedures to be followed in the event that a slack line develops. It states: "A slack in the tow rope exists any time the distance between the tow plane and sailplane is less than the length of the rope. Left uncorrected, this 'slack line' may worsen and become hazardous. A slack line can result from anything that closes the distance between the two airplanes, including turbulence, slowing of the tow plane, and poor aerotow corrections. Whatever the cause, correct a slack line using the following steps:

- "1. Recognize. It is extremely important to recognize you are in a slack line situation and stop the slack line from worsening. Do this by freezing the stick to prevent aggravating the situation.
- "2. Fly formation. Flying formation with the tow plane means that, momentarily, there is no relative speed between the tow and the sailplane. Make control inputs to freeze the towplane at a constant spot in your windscreen. The step not only prevents the slack from worsening, it actually removes the slack as the powered tow plane begins to speed away from the sailplane. You should see the slack decrease in size as the tow plane pulls away. Another way to lose speed in to open the airbrakes; however, doing so is usually unnecessary, and even IPs rarely use this technique.
- "3. Accelerate. You want to match the tow plane's speed as the slack disappears. As the slack lessens, descend and/or yaw toward the tow plane to accelerate. Too little acceleration results in a jerk as the rope straightens or possibly a broken rope when the rope straightens. Too much acceleration causes another slack line. Your IP will show you techniques that will enable you to finesse a slack line recovery."

Chapter 10, section 11 of the 34 OG Manual AM-251 addresses emergency tow releases, and states (in

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Narrative (Continued)

part): "Several things can happen to make you want to release from tow early: Losing sight of the tow plane, tow plane loss of power, a dangerous aerotow situation resulting from inattention, strong turbulence, improper slack line recovery, or a deliberate rocking of the tow plane's wings (a visual signal that the tow pilot wants you to release from tow). Treat an emergency or any unplanned release similar to a rope break. . Also note that the tow pilot has the ability to release the rope at his end and may do so in vary rare instances. . ."

"USAFA Tow Pilot Checkout" is an outline of subject matter and maneuvers to be mastered before tow pilots are allowed to tow gliders. Item 39, "Towing Emergencies," addresses several emergency situations, to wit:

Glider high on takeoff -- Monitor for emergency release;

Glider out of position -- Tow plane in spin;

Glider Cannot release from tow rope -- Descent with glider on tow;

Glider training maneuvers -- Slack line, box the wash.

Doss Aviation's chief tow pilot was questioned whether his tow pilots were instructed on "kiting" emergencies. He replied via e-mail that tow pilots "are instructed on [kiting] during their initial, comprehensive checkout," but admitted that there was no written procedure on the subject.

In addition to the Federal Aviation Administration, parties to the investigation were the United States Air Force Academy and Textron-Lycoming Engines.

The wreckage was released to the insurance company's adjuster on June 11, 2002.

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

AVIATION)ccurren	ce Type:	: Accident									
Landing Facility/Approach Informati	ion											
Airport Name		Airp	ort ID:	Airport Elevat	tion	Runv	way Used	Runwa	ay Lengt	:h	Runw	vay Width
USAF Academy		AFF		6572 Ft.	. MSL	16R	٠	4500	_		40	
Runway Surface Type: Asphalt												
Runway Surface Condition: Dry												
Type Instrument Approach: NONE												
VFR Approach/Landing:												
Aircraft Information												
Aircraft Manufacturer Piper/Cub Crafters			Model/ PA-18						Serial 9917	Number CC		
Airworthiness Certificate(s): Normal												
Landing Gear Type: Tailwheel												
Homebuilt Aircraft? No Numbe	er of Seats: 2			d Max Gross W	/t.		1750	LBS	Numbe	er of Engines: 1		
Engine Type: Reciprocating			ngine Mai ycoming	Manufacturer: Model/Series: O-360-CIG					Rated Power: 180 HP			
- Aircraft Inspection Information												
Type of Last Inspection		Dat	e of Las	Last Inspection Time Since Last Inspection						Airframe Total Time		
100 Hour		04	1/2002					15 Ho	ours	1215 Hours		215 Hours
- Emergency Locator Transmitter (ELT) Inf	formation											
ELT Installed? No	ELT Operated?	No	ELT Aided in Locating Accident Site? No									
Owner/Operator Information												
Registered Aircraft Owner			Street A		refree	Cir., W						
Doss Aviation			City	3320 Carefree Cir., W. Colorado Springs						State		Zip Code 80917
		$\overline{}$	Street A	ddress	·					100		50917
Operator of Aircraft		-		Same as	Reg'd	d Aircra	aft Owner			1 21-1		~ 0.1
Same as Reg'd Aircraft Owner			City						State	}	Zip Code	
Operator Does Business As:						Ор	perator Desig	nator Co	ode:			
- Type of U.S. Certificate(s) Held: None												
Air Carrier Operating Certificate(s):												
Operating Certificate:				Operator C	Certifica	ate:						
Regulation Flight Conducted Under: Public	c Use											
Type of Flight Operation Conducted: Publi	ic Use											
	FA(CTUAL	REPO	RT - AVIATI	(ON	•		•				Page 2

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

City State Date of Birth On File On File On File On File Sex: M Seat Occupied: Front Principal Profession: Civilian Pilot Certificate(s): Commercial Airplane Rating(s): Multi-engine Land; Single-engine Land Rotorcraft/Glider/LTA: None	Age 72									
Name On File Sex: M Seat Occupied: Front Principal Profession: Civilian Pilot Certificate (s): Commercial Airplane Rating(s): Multi-engine Land; Single-engine Land										
On File Sex: M Seat Occupied: Front Principal Profession: Civilian Pilot Certificate Number: On File Certificate(s): Commercial Airplane Rating(s): Multi-engine Land; Single-engine Land										
Sex: M Seat Occupied: Front Principal Profession: Civilian Pilot Certificate Number: On File Certificate(s): Commercial Airplane Rating(s): Multi-engine Land; Single-engine Land	72									
Certificate(s): Commercial Airplane Rating(s): Multi-engine Land; Single-engine Land										
Airplane Rating(s): Multi-engine Land; Single-engine Land										
Rotorcraft/Glider/LTA: None										
Rotorcraft/Glider/LTA: None										
Instrument Rating(s): Airplane										
Instructor Rating(s): None										
Type Rating/Endorsement for Accident/Incident Aircraft? No Current Biennial Flight Review? 03/2002										
Medical Cert.: Class 2 Medical Cert. Status: Valid Medicalw/ waivers/lim. Date of Last Medical Exam: 08/200										
<u>'</u>										
- Flight Time Matrix All A/C This Make and Model Airplane Single Engine Airplane Mult-Engine Night Instrument Actual Simulated Rotorcraft Glider	Lighter Than Air									
Total Time 15479 8000										
Pilot In Command(PIC)										
Instructor										
Last 90 Days 150										
Last 30 Days										
Last 24 Hours										
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? Yes Second Pilot?	0									
Elight Dlon/Itinorony										
Flight Plan/Itinerary Type of Flight Plan Filed: None										
Departure Point State Airport Identifier Departure Time	Time Zone									
Same as Accident/Incident Location AFF 1200	MDT									
Destination State Airport Identifier										
Local Flight Aff										
Type of Clearance: None										
Type of Airspace: Class D										
Weather Information										
Source of Briefing: Unknown										
Method of Briefing: Unknown										
FACTUAL REPORT - AVIATION	Page 3									

NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

	AYLATION		Occu	rrence Typ	pe: Ac	ccident	t						
Weather	Information												
WOF ID	Observation Time	Time Zone	WOF EI	evation	W	WOF Distance From Accident Site Direction					Direction From	m Accident Site	;
AFF	1155	MDT	657	2 Ft. MSL	<u>. </u>				2 NM 100 Deg. N				
Sky/Lowes	st Cloud Condition:						Ft. A	GL	Condition o	f Ligh	nt: Day		
Lowest Ce	eiling: Broken	6500	0 Ft. AGL		Visibil	ity:	15	SM	Alti	meter:	29.82	"Hg	
Temperatu	ure: 16 °C	Dew Point:	-1	°C Wi	nd Dire	ection:	210	Density Altitude: 8328					Ft.
Wind Spee	ed: 14	Gusts:		We	eather	Condti	ons at Acc	ident Si	te: Visual C	Cond	itions		
Visibility (R	RVR): Ft.	Visibility	y (RVV)	SM	1 Ir	ntensity	of Precipit	tation:					
Restriction	ns to Visibility:												
Type of Pre	ecipitation: None												
Accident	Information												
Aircraft Damage: Destroyed				Aircraft Fire: Ground				Aircraft Explosion None					
Classificati	ion: U.S. Registered/U	I.S. Soil											
- Injury Su	mmary Matrix	Fatal	Serious	Minor	Nor	ne	TOTAL						
First Pi	ilot	1					1						
Second	d Pilot							7					
Studen	nt Pilot							7					
Flight I	nstructor							7					
Check	Pilot												
Flight E	Engineer												
Cabin A	Attendants												
Other C	Crew							7					
Passen	ngers												
- TOTAL A	ABOARD -	1					1	7					
Other G	Ground							1					
- GRAND	O TOTAL -	1					1	1					

National Transportation Safety Board

FACTUAL REPORT AVIATION NTSB ID: DEN02GA039

Occurrence Date: 04/26/2002

Occurrence Type: Accident

Δι	dm	ini	etrat	ive	Int	f∩rm	nation
\neg	um	11 11	อแลเ	.1 V C	11 11	IUIII	ιαιισι

Investigator-In-Charge (IIC)

Arnold W. Scott

Additional Persons Participating in This Accident/Incident Investigation:

James E Mack Aviation Safety Inspector - Operations FAA Flight Standards District Office 26805 E. 68th Ave., Suite 200 Denver, CO 80249